

# PDS User-Centered Design (UCD) Tools Update



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# Overview

## Updated Tools:

- PDS Table Explorer
- Mars Image Explorer
- LACE

# PDS Table Explorer

Columns		Rows		Output	Source Files						
<div>Select ColumnsOrder Columns</div>		<div>Select RowsOrder Rows</div>		File Type <div>comma separated - CSV</div> <div><input checked="" type="checkbox"/> Include header row?</div> <div>Download</div>	Label <div>LOLAEDR122590153.LBL</div> <div>Tabular Data File<div>LOLAEDR122590153.DAT</div></div> <div>The total number of columns allowed to be processed has been exceeded. Only 500 out of 3261 columns were processed.</div>						
500 of 500 columns selected		7142 of 7142 rows selected									
Preview											
1 to 10 of 7142 rows    Jump To: <div>1 to 10</div> Show: <div>10 per page</div>											
row	TIME_STAMP - Item 1	TIME_STAMP - Item 2	TIME_STAMP - Item 3	TIME_STAMP - Item 4	SEQUENCE_COUNT - Item 1	PHASE_A_LOCK	PHASE_B_LOCK	UART_ERROR	DUTY_CYCLE - Item 1	DUTY_CYCLE - Item 2	DUTY_CYCLE - Item
1	7	247	4	225	38017	0	0	1	-1	70	-
2	7	248	4	225	38018	0	0	1	-1	20	
3	7	249	4	225	38019	0	0	1	-1	76	-1
4	7	250	4	225	38020	0	0	1	-1	56	-
5	7	251	4	225	38021	0	0	1	-1	70	1
6	7	252	4	225	38022	0	0	1	-1	47	-
7	7	253	4	225	38023	0	0	1	-1	74	
8	7	254	4	225	38024	0	0	1	-1	66	
9	7	255	4	225	38025	0	0	1	-1	81	
10	8	0	4	225	38026	0	0	1	-1	35	

# Mars Image Explorer

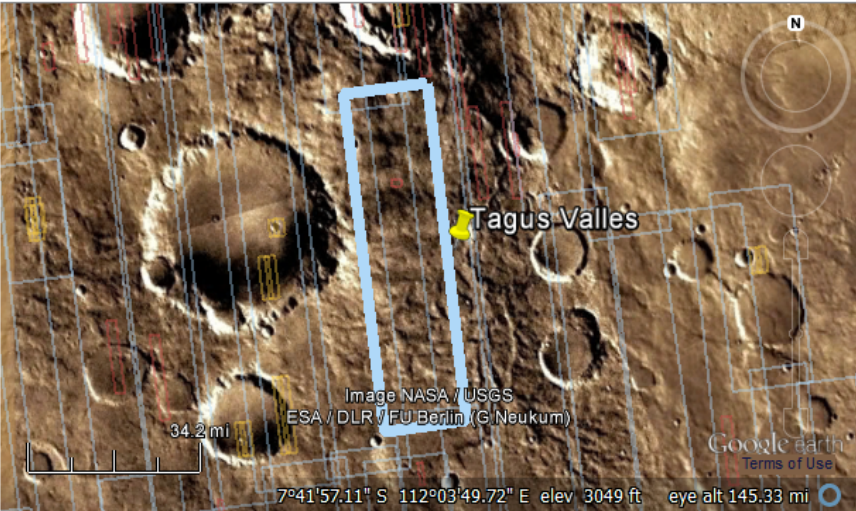
Mars Image Browser

Images: Up to 500 Refresh Images

☒ Placenames ☒ Scale ☒ Location

Y: incidence angle

Key: ☒ CTX ☒ MOC-NAWA ☒ HiRISE



tagus valles Search Enter either the name of a feature (e.g., Gale Crater) or a lat lon combo (e.g., 12.34N 56.78E).

Saved Locations:

Go To Delete Save Show URL

Image Metadata

[Download Image](#) [Center on Image](#)  
latitude -6.716  
longitude 114.27  
acquisition time 2009-12-15T20:59:50.000  
emission angle 0.1  
incidence angle 37.73  
Mars time of day 2009-07-15T09:07:20.442  
phase angle 37.76  
pole state  
solar distance 213838417.3  
solar longitude 303.71

Image List Image Thumbnails

Showing images 1 through 88 out of 88 (2.488 seconds)

Image	solar longitude	incidence angle
b07_012486_1728_xn_07s248w.img (CTX) Valleys and craters near Tinto Vallis	234.56	53.12
g15_023971_1710_xn_09s243w.img (CTX) Context for Viking 1 images 758A01 to 758A13 and 758A51 to 758A68	356.86	34.81
b08_012921_1724_xn_07s244w.img (CTX) Context for Viking 1 images 758A01 to 758A13 and 758A51 to 758A68	256.04	48.8
p02_001977_1746_xn_05s246w.img (CTX) Crater near Tagus Valles	157.55	56.48
g17_025026_1696_xn_10s246w.img (CTX) Terra Cimmeria	35.98	47.36
b09_013066_1713_xn_08s242w.img (CTX) Context for Viking 1 images 758A01 to 758A13 and 758A51 to 758A68	263.2	46.74
p05_002821_1705_xn_09s247w.img (CTX) Crater south of Tinto Vallis	194.09	55.59
g18_025092_1749_xn_05s247w.img (CTX) Valleys and craters near Tinto Vallis	38.3	45.82
b11_013910_1733_xn_06s245w.img (CTX) Context for Viking 1 images 758A01 to 758A13 and 758A51 to 758A68	303.71	37.73
b11_014121_1739_xi_06s246w.img (CTX) Landforms in and near Mariner 9 image DAS 8909609	313.34	35.97

# LACE Progress

- ✧ **LACE**: PDS4 Label Creation and Eding Tool
- ✧ Much progress since initial demonstration to MC one year ago
- ✧ Conducted 13 1-hour testing sessions with users to assess interface usability and functionality, and to gather new requirements
- ✧ Usage by LADEE UVS instrument team preparing labels and local data dictionaries for delivery to Atmospheres

TEGA\_EGARDR\_V1.xml

Export Label

PDS4 LABEL  
CREATE + EDIT

LACE

Product\_Observational

Identification\_Area

Observation\_Area

File\_Area\_Observational

Product\_Observational

Identification\_Area

The identification area consists of attributes that identify and name an object.

logical\_identifier

urn:nasa:pds:PHX:TS058RDR\_EGS:2008\_07\_24\_U1

version\_id

1.0

title

PHX MARS THERMAL EVOLVED GAS ANALYZER 4 EGS

Required length: 1 to 255 characters

information\_model\_version

1.2.0.1

product\_class

Product\_Observational

Alias\_List

Optional, click to include

Citation\_Information

Optional, click to include

Modification\_History

The Modification\_History class tracks the history of changes made to the product once it enters the registry system.

Observation\_Area

Reference\_List

Optional, click to include

File\_Area\_Observational

# LACE Feature Summary

- ✎ Form-based label entry: vs. XML Editor
- ✎ Schema compliance support: Alerts user about required elements/fields and [schema/schematron constraints](#)
- ✎ [Auto-validated label](#): LACE only generates valid PDS4 XML
- ✎ [Support for Local Data Dictionaries](#)
- ✎ [Persistent storage of labels in Label Manager](#)
- ✎ [Save-as-you-type field entry](#)
- ✎ [Instantaneous error feedback](#)
- ✎ [Field and element documentation display](#)
- ✎ Rapid navigation within labels using Tree View
- ✎ Totally web browser-based: No software to install

# Planned Features / Release Timeline

- ✧ Template support\*
- ✧ Cut/paste\*
- ✧ XML preview\*
- ✧ Table entry support, including auto-calculating offsets
- ✧ Coordinated editing of label and associated local data dictionary
- ✧ Collaborative sharing of labels/templates

- LACE Beta version available for use by end of May
- LACE Version 1.0 release available by next F2F in August 2014